**VISHAY.**

# NTC Thermistors, Molded Range

## FEATURES
- Designed for harsh environments
- Excellent for surface temperature measurement
- Metal strip for heat conduction and easy mounting (2322 640 98004)
- High accuracy at 100 °C
- Minimum 350 V dielectric withstanding voltage

## APPLICATIONS
High temperature measurement control:

## DESCRIPTION
Molded chip thermistor with negative temperature control and two solid tinned nickel leads. The body color is white and the device is non-flammable.

The thermistor 2322 640 98004 is provided with a metal strip for mounting.

## MARKING
The thermistors are marked with a grey dot.

## MOUNTING
2322 640 90004: by soldering in any position
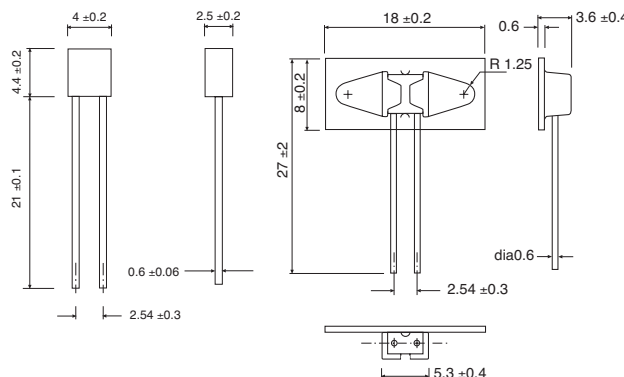
2322 640 98004: by means of the mounting strip.

## PACKAGING
The thermistors are packed in cardboard boxes:

   2322 640 90004: 500 units

   2322 640 98004: 400 units.

## DIMENSIONS in millimeters

### QUICK REFERENCE DATA

| PARAMETER | VALUE | |
|---|---|---|
| | 2322 640 90004 | 2322 640 98004 |
| Resistance value at: | | |
|   +25 °C | 12 kΩ | |
|   +100 °C | 950 Ω | |
| Tolerance on $R_{25}$-value: | | |
|   +25 °C | ±7% | |
|   +100 °C | ±5% | |
| $B_{25/85}$-value | 3750 K | |
| Temperature coefficient | −4.2%/K | |
| Maximum dissipation | 0.25 W | |
| Dissipation factor | 7 mW/K | 9.5 mW/K |
|   when mounted on a heatsink; note 1 | 19 mW/K | 27 mW/K |
| Thermal time constant | 19 s | 33 s |
|   when mounted on a heatsink; note 2 | 10 s | 5 s |
| Heat capacity of ceramic (in air) | 0.028 J/K | 0.028 J/K |
|   when mounted on a heatsink | 0.13 J/K | 0.3 J/K |
| Response time; note 2 | 3 s | |
| Operating temperature range: | | |
|   at zero dissipation | −10 to +125 °C | |
|   at maximum dissipation | 0 to +55 °C | |
| Dielectric withstanding voltage (RMS) between terminals and coating | min. 350 V | |
| Insulation resistance between terminals and coating at 100 V (DC) | min. 100 MΩ | |
| Mass | ≈0.3 g | ≈0.5 g |

**Notes**

1. Measurements made in still air with the thermistor mounted on a heatsink of 100 $cm^2$, thickness 1.5 mm, connected between phosphor-bronze wires (∅1.3 mm).

2. The thermistor being transferred from ambient air of +25 °C to a silicone oil (MS200/50) bath of 85 °C.



Component outline 2322 640 90004.

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